

## TELEVISION FUNCTIONALITY ON A CHIP

### ABSTRACT OF THE DISCLOSURE

A television on a chip (TVOC) system that provides a cost effective approach for providing television functionality on a single integrated circuit chip is disclosed. A TVOC includes the functionality necessary to receive and display television signals in a variety of input and output formats. A TVOC can be used in set-top boxes for cable and satellite television, or directly within a television. All functionality provided can be provided on a single integrated circuit. TVOC includes a data transport module, an IF demodulator, a digital audio engine, an analog audio engine, a digital video engine, and an analog video engine. The TVOC also includes three sets of interfaces including output interfaces, control interfaces and ancillary interfaces. Further features and embodiments provide enhanced functionality and increased efficiencies.